Jack Lutz

✉ jwlutz65@gmail.com   in linkedin.com/in/jwlutz   ○ github.com/jwlutz   ⊕ jwlutz.com

Education

University of California, Los Angeles   Expected June 2027
B.S. Statistics and Data Science GPA: 3.5, Major GPA: 3.8   *Los Angeles, CA*
- **Relevant Coursework:** Probability Theory, Linear Algebra, Vector Calculus, Programming in R, Data Analysis in R

Experience

Lutz Consulting Group   Nov 2024 – Present
Founder   *Las Vegas, NV*
- Provide technical consulting and full-stack development to e-commerce businesses, startups, and content studios.
- Engineered end-to-end inventory system to process 40,000+ items using computer vision/OCR pipeline, AWS S3 storage, and Supabase validation workflows.
- Drove 3x increase in client online sales through website redesign, achieving 4-figure weekly revenue and 100% uptime.
- Onboarded non-technical users to new system through training and documentation.

New York Life Insurance Company   June 2025 – Aug 2025
Data Analyst Intern   *New York, NY*
- Reverse-engineered database migration schemas across DHD production PostgreSQL instances, mapping complex data transformations and identifying millions of stale records.
- Built RAG-enabled underwriting chatbot prototype using company underwriting manual as knowledge base, demonstrating feasibility of LLM-powered policy guidance.
- Finalist in company-wide AI Innovation Competition for prototyping RAG-enabled chatbot plugin for Tableau dashboards, querying 10+ years of nationwide office data.
- Designed A/B testing framework to expose LLM agreeableness bias in chatbot responses, establishing prompt engineering best practices.

Projects

UCLA Dining Recommendation System | *Python, FastAPI, PostgreSQL, Google OR-Tools, Go*   2024 – Present
- CDO of UCLA startup, optimizing meal recommendations based on students' nutritional goals.
- Built constraint optimization algorithm using Google OR-Tools to generate personalized meal plans from 4,000+ menu items.
- Developed web scraper in Go and REST API in FastAPI, integrating with Supabase backend.

AI Web Scraper Chrome Extension | *TypeScript, Chrome Extension MV3*   2024
- Built and published Chrome extension with AI-powered data extraction and cleaning via Claude API integration.
- Architected clean separation between core TypeScript engine and Chrome extension wrapper; supports CSV, XLSX, JSON export.

Quantitative Backtesting Engine | *Python, pandas, NumPy*   2024
- Built backtesting framework for Bruin AI Research Club's quantitative trading research; validated within 0-3% of established Python backtesting frameworks.
- Implemented transaction-based position tracking, fractional shares, and pluggable entry/exit rules using Abstract Base Classes.
- Designed point-in-time data architecture to prevent lookahead bias and data leakage.

Skills

Languages: Python, R, SQL, TypeScript/JavaScript, Go

Technologies: Git, pandas, NumPy, matplotlib, Tidyverse, AWS, FastAPI, Supabase, PostgreSQL, PyTorch, Scikit-Learn, FAISS, LangChain, OpenRouter, Hugging Face, Google OR-Tools, Chrome Extension MV3

Leadership: Eagle Scout | President, Bruin AI Research Club (Led DataFest team, individual problem-solving award 2023) | Lambda Chi Alpha Executive Board.